

Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

1. (previously presented) A system positioning a digital flat panel x-ray receptor for a variety of diagnostic x-ray protocols, comprising:

at least one x-ray source selectively emitting an x-ray beam;

a digital flat panel x-ray receptor having an imaging face;

an upwardly extending, floor-supported column supporting the receptor for movement to different positions up and down along an upwardly extending axis, about the same or a different upwardly extending axis, and about a lateral axis transverse to the axis along which the receptor moves up and down;

said receptor and at least one x-ray source being mounted on separate supports for movement independent of each other; and

said at least one x-ray source and said receptor being juxtaposed for directing said x-ray beam to said imaging face of the receptor for a variety of diagnostic x-ray protocols, including protocols in which the source is above the receptor and protocols for lateral imaging in which the source and receptor are at matching levels.

2. (currently amended) A system positioning a digital flat panel x-ray receptor for a variety of diagnostic x-ray protocols, comprising:

an x-ray source selectively emitting an x-ray beam;

a digital flat panel x-ray receptor having an imaging face;

a first track supporting, for movement along the first track, a first downwardly extending, telescoping column that in turn supports said source for movement up and down, about a first up-down axis, and about a first lateral axis transverse to said first up-down axis, to thereby position and orient said x-ray beam for a variety of x-ray imaging protocols;

a second track supporting, for movement along the second track, a second, downwardly extending, telescoping column that in turn supports said receptor for movement up and down, about a second up-down axis, and about a second lateral axis transverse to said second up-down axis, to thereby position and orient said imaging face of the receptor to match the position and orientation of said x-ray beam for said variety of x-ray imaging protocols;

said variety of x-ray imaging protocols being for standing, sitting and recumbent patients,
including protocols in which the source is above the receptor and protocols for lateral imaging in which the source and receptor are at matching levels;

said first and second tracks being spaced from each other to allow movement of said first column along the first track that is independent of movement of the second column along the second track.

3. (currently amended) A system positioning a digital flat panel x-ray receptor for a variety of diagnostic x-ray protocols, comprising:

an x-ray source selectively emitting an x-ray beam and positioning said beam at positions and orientations for a variety of x-ray imaging protocols, and a supporting structure for said x-ray source;

a digital flat panel x-ray receptor having an imaging face;

a track supporting, for movement along the track, a downwardly extending, telescoping

column that in turn supports said receptor for movement up and down, about an up-down axis, and about a lateral axis transverse to said up-down axis, to thereby position and orient said imaging face of the receptor to match the position and orientation of said x-ray beam for said variety of x-ray imaging protocols;

said variety of x-ray imaging protocols being for standing, sitting and recumbent patients, including protocols in which the source is above the receptor and protocols for lateral imaging in which the source and receptor are at matching levels;

said track being spaced from said supporting structure for the x-ray source to allow movement of said column along the track that is independent of movement of the x-ray source or the support thereof.

4. (previously presented) A system as in claim 1, wherein the receptor has at least five degrees of freedom relative to the column.

5. (previously presented) A system as in claim 1, further including motorized drivers for moving the receptor.

6. (previously presented) A system as in claim 1, further including encoders coupled with the column to provide digital information regarding movement thereof, and a computer coupled with the encoders to receive digital information therefrom and programmed to utilize the information to control said movement.

7. (previously presented) A system as in claim 1, wherein the receptor moves in at least

two translational and three rotational motions.

8. (new) A system as in claim 7, further including motorized drivers for moving the receptor.

9. (new) A system as in claim 7, further including encoders coupled with the column to provide digital information regarding movement thereof, and a computer coupled with the encoders to receive digital information therefrom and programmed to utilize the information to control said movement.

10. (new) A system positioning a digital flat panel x-ray receptor for a variety of diagnostic x-ray protocols, comprising:

an x-ray source selectively emitting an x-ray beam;

a digital flat panel x-ray receptor having an imaging face;

a first track supporting, for movement along the first track, a first downwardly extending, telescoping column that in turn supports said source for movement up and down, about a first up-down axis, and about a first lateral axis transverse to said first up-down axis, to thereby position and orient said x-ray beam for a variety of x-ray imaging protocols;

a second track supporting, for movement along the second track, a second, downwardly extending, telescoping column that in turn supports said receptor for movement up and down, about a second up-down axis, and about a second lateral axis transverse to said second up-down axis, to thereby position and orient said imaging face of the receptor to match the position and orientation of said x-ray beam for said variety of x-ray imaging protocols,

wherein the receptor moves in at least two translational and three rotational motions.

11. (new) A system as in claim 10, further including motorized drivers for moving the receptor.

12. (new) A system as in claim 10, further including encoders coupled with the column to provide digital information regarding movement thereof, and a computer coupled with the encoders to receive digital information therefrom and programmed to utilize the information to control said movement.

13. (new) A system positioning a digital flat panel x-ray receptor for a variety of diagnostic x-ray protocols, comprising:

an x-ray source selectively emitting an x-ray beam and positioning said beam at positions and orientations for a variety of x-ray imaging protocols, and a supporting structure for said x-ray source;

a digital flat panel x-ray receptor having an imaging face;

a track supporting, for movement along the track, a downwardly extending, telescoping column that in turn supports said receptor for movement up and down, about an up-down axis, and about a lateral axis transverse to said up-down axis, to thereby position and orient said imaging face of the receptor to match the position and orientation of said x-ray beam for said variety of x-ray imaging protocols,

wherein the receptor moves in at least two translational and three rotational motions.

14. (new) A system as in claim 13, further including motorized drivers for moving the receptor.

15. (new) A system as in claim 13, further including encoders coupled with the column to provide digital information regarding movement thereof, and a computer coupled with the encoders to receive digital information therefrom and programmed to utilize the information to control said movement.